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ABSTRACT

This paper illustrates how organizational theory can be usefully applied to issues of classroom management. A review of research findings on the relationship between the teacher's use of authority and the implementation and outcomes of "complex instruction" is offered. "Complex instruction" refers to instruction in which different groups carry out different activities at a pace not directly regulated by the teacher, and is characterized by rotating groups, uncertainty, and development of higher order thinking skills. Literature suggests that the teacher role is changing from direct supervision to one that delegates authority, treats status problems, develops students' thinking, and provides specific feedback. A training program to prepare teachers for the delegation of authority includes a workshop, which consists of lectures and a practicum, and followup evaluation and feedback, which is based on the Teacher Observation Instrument and the Whole Class Observation Instrument. Four figures are included. (14 references) (LMI)

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CLASSROOM MANAGEMENT AND COMPLEX INSTRUCTION

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Classroom Management and Complex Instruction

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As a sociologist, I view classroom management as situational. Rather than seeing the world as made up of more effective and less effective classroom management practices, the sociologist conceptualizes the type of management that is optimal, given the nature of the classroom task or activity. Available research on classroom management typically describes optimal strategies for whole-class instruction. The only difficulty with this literature, from a sociological perspective, is that the authors state their generalizations about what is effective as if these generalizations applied under all conditions --- and they don't. When the teacher is working with the whole class of students, treating them as one large batch, the challenge is one of effective direct supervision. Many people cannot talk at once and students cannot wander around unless they are obeying classroom rules or are given permission by the teacher. It is under these circumstances that the teacher's enforcement of a simple set of rules, direct eye contact as well as "having eyes in the back of one's head" become so important as classroom management skills.

The optimal management strategy when students are working as independent small groups, however, is quite different. As a matter of fact, if the teacher uses the strategies that have worked well for the whole class setting, she or he will be markedly less effective than if a totally different management strategy is used. For example, if the teacher attempts to control what is happening in the small groups through a process of direct supervision, she or he will inhibit the learning process

that could take place within these groups. Moreover, she or he will prevent students from taking responsibility for control of their own behavior and for that of other group members. In contrast, there is considerable research on large batch processes like seatwork showing that unless the teacher is moving around and directly monitoring what is going on, then there is significant disengagement among the students and corresponding loss of instructional gains.

The choice of management strategy should not depend on ideology concerning how children should be controlled or on personal style, but on the technical requirements of the task that the teacher has chosen. Similarly, the concept of order in a classroom is relative to the task structure. Order in a whole class setting may consist in relative quiet with all eyes focused on the teacher who is talking or eyes downward on worksheets as students quietly read and write. In contrast, order when cooperative learning is under way is relatively noisy. However, closer examination will reveal that the students are talking about their tasks within their groups. Those who are moving about the classroom are purposefully going about their business in connection with the group assignment. No one is lined up waiting to talk with the teacher. Despite the noise level, there is minimal disengagement among the students.

This sociological view of classroom management is similar to that of Doyle in his article in the Handbook of Research on Teaching(1986) and in his address to this group last year(1990). He argues that order is relative to the activity that the teacher is attempting to use. Misbehavior is an action that threatens to disrupt the activity flow or pull the class toward an alternative program of action. He states that if the activity system is not established and running in a classroom, no amount of discipline will create order.

My goal for this presentation is to illustrate how organizational theory can be usefully applied to issues of classroom management. I will share with you some research findings on how the teacher's use of authority relates to the implementation and outcomes of what we call complex instruction. The "we" that I refer to is the staff of the Program for Complex Instruction at Stanford that has been engaged in research, development, and evaluation since 1979. I also want to share with you what we have found with respect to the preparation of teachers to manage classrooms with small groups.

What is Complex Instruction?

Under the general rubric of cooperative or collaborative learning, I want to focus on those kinds of classroom activities that are complex from the teachers's point of view and involve elements of uncertainty from the student's point of view. When cooperative learning involves different groups carrying out different activities, especially when those activities require different materials, there is considerable complexity from the teacher's point of view. Cooperative learning is not necessarily uncertain from the students' point of view. If the cooperative learning activities involve the equivalent of worksheet questions(as they often do) then the level of uncertainty among the students may not be very great. In contrast, if the activities require higher-order thinking skills, creative problem-solving, the creation of answers or solutions without the provision of step-by-step instructions, or if the academic nature of the demands of the task are quite high for the level of achievement of the student -- then there is significant of uncertainty from the student's point of view.

Complex instruction is precisely the situation that is complex from the teacher's point of view and uncertain from the student's point of

view. When I refer to complex instruction, I mean instruction in which different groups of individuals are carrying out different activities at a pace that is not directly regulated by the teacher. Each group has different activity card; and each student has a report or worksheet to fill out as a result of the activity. Groups rotate between tasks. Complex instruction always involves some uncertainty from the student perspective. Task instructions are not step-by-step but leave the group of students to discuss and construct some meanings for what they are doing. Tasks are creative and/or involve problem-solving; they require higher-order thinking. For example, groups of seventh graders may have to figure out how they would defend a Crusader castle; alternatively, they may be directed to create a Gutenberg printing press out of Leggo Pieces. In a unit on language arts, they may be asked to create a three-dimensional poem. Or,in a math-science curriculum, a group of second graders may attempt to discover what makes a flashlight light.

Application of Organizational Theory

The sociological view of classroom management sees the teacher as supervisor of 30 workers who labor under very crowded conditions. Although the analogy is by no means perfect, e.g. students don't get paid and can't be fired, there are many ways in which the analogy is a good fit to the relationship of teachers and students in a classroom.

As is the case of supervisors in any organization, teachers have the right and duty to allocate tasks to student-workers and to hold them accountable for the outcomes of those tasks. Teachers have the right to evaluate students for their task performance. Teachers have the right to develop rules and procedures that govern the conditions of the students' work. Lastly as in any formal organization, the system is not one of

coercion but one of mutually held roles and responsibilities. For example, unless students grant teachers these rights, the system is in danger of breaking down altogether.

It is a mistake to think of the teacher in this authority position as a bureaucratic supervisor in a factory who oversees workers as they carry out routine tasks. It is true that students who have a routine task of filling out worksheets under the direct supervision of a teacher look much like routine factory workers under the direction of a foreman. However, as in the case of complex instruction, groups of students may also function like an R & D team as they engage in a discovery process; in this case the teacher may delegate to the student-workers considerable authority to carry out their task as they see fit, holding them accountable for the end product. The analogy of the supervisor and the workers holds equally well in the former as in the latter case.

Differentiated Task Structures

One difference between these two cases lies in the shift of the task or activity structure of the class. When work becomes highly differentiated, i.e. working with different groups and materials, the teacher can manage and guide the students' behavior through detailed rules and schedules. However, this solution assumes that the workers are facing tasks that are relatively certain. Comstock and Scott(1977) summarized this argument, "When work is predictable, effectiveness and efficiency are enhanced by the development of clear decision rules and operating procedures that allow minimal discretion to individuals. But when work is not predictable, performance programs cannot be developed and individuals must be called upon to make the best judgments of which they are capable"(p. 177). When different groups of workers are carrying out

different and uncertain tasks, it is more efficient if they have a clear sense of authority and can make their own decisions, and can learn from their own mistakes.

In classroom terms, when groups of students are working on different tasks, the teacher cannot be everywhere at once. Given a challenging curriculum delivered in a small group setting, it is necessary that teachers not rely exclusively on direct supervision, i.e. telling students exactly what to do, when and how to do it. When the tasks are discovery tasks and students work in small groups --after an initial orientation and before a final wrap-up, it becomes obviously inappropriate for teachers to be lecturing to small groups of students or to the class as a whole. Empirically, however, we have found that unless they have been adequately prepared, teachers will attempt to do so. At times, teachers will also try to reduce student uncertainty by using detailed and overly explicit worksheets in which students "fill in the blanks." The objective of conceptual learning, however, cannot be attained by tasks of such a mechanistic nature.

Bossert's observational study (1979) suggests that highly differentiated task structures are associated with a reduction in direct supervision. He showed that the same teachers used their authority quite differently when they employed different task structures. They were much less likely to make direct disciplinary remarks of a "cease and desist" variety when there were multiple tasks in operation. He concluded on the basis of his observations that in a large group situation the opportunity for misbehavior to spread and the necessity for pupil attention in recitation increase, thus making teacher control of prime importance.

Similarly, in our studies of complex instruction, we find dramatic

differences in the profile of teacher behavior when conducting whole class orientation and wrap-up as compared to supervising students working in groups at learning centers. Figure I gives the average rate of teacher behavior for 13 teachers studied extensively during complex instruction. There is a separate set of bars for behavior during whole class instruction(orientation and wrap-up) and for behavior during small group instruction. Similar to Bossert's findings, there is a marked drop in the rate of teacher's disciplinary remarks from whole class instruction to small-group instruction. During whole class instruction, teachers average 3 disciplinary remarks per 10 minutes while during small groups this kind of teacher behavior drops to only once per 10 minutes. The rate of direct instruction also drops, but the rate of facilitation in which teachers try to help the students get through their task rises dramatically from nine to almost 15 times per 10 minutes. Similarly the rate of asking questions rises dramatically while small groups are in session. Many teachers ask the students questions about what they are doing as a way to facilitate their completion of the task. Finally the rate at which teachers talk about children's thinking is higher during small-group instruction.

Lotan and I(1989) have found that in those classrooms where there are more small groups (a smaller ratio of learning centers to students), there are lower rates of direct supervision. In this study, the index of direct supervision is made up of facilitation, direct instruction, substantive questioning and disciplining.

When independent small groups are in operation, attempts to use direct supervision can be quite ineffective as a management strategy. Steven H. Rosenholtz(1981) found that direct supervision by the teacher was positively related to engagement only under conditions of fewer groups and

materials. When the same teachers used multiple materials and groups, direct supervision was unrelated to the level of engagement. When the technology was more differentiated, the use of peer relations was a powerful predictor of engagement.

Delegation of Authority

When, as in the case of complex instruction, the tasks are both differentiated and uncertain, it becomes essential for the teacher to delegate authority to lateral relations among the students. According to Perrow(1967), once technology has become more uncertain, two necessary changes should be made in order to maintain or increase organizational productivity. The first is the need for more delegation of authority to the workers. The second is the need for more lateral communication among the workers. If these changes do not take place, there will be loss of organizational effectiveness.

There are several sources of uncertainty for the student in complex instruction. The first source is the nature of the group tasks that typically require discovery and creative problem-solving. The second source is at the individual level. Many of the students with whom we work are not able to read the activity card or worksheet or to understand the language of instruction. Complex instruction is typically employed in multilingual classrooms with a wide academic range.

Lateral relations are essential as a method of managing this linguistic and academic heterogeneity. Students use each other as resources to gain access to the assignments; they are trained to help each other in understanding the instructions, perhaps by reading or by translating into the student's native language. Thus, many of the management problems faced by teachers in heterogeneous classrooms are

nipped in the bud by the availability of fellow students as resources.

The maintenance of lateral relations is a central task of the teacher of complex instruction. We have repeatedly found that the larger the proportion of students talking and working together, the greater are the learning gains on standardized achievement tests(Cohen, Lotan and Leechor, 1989). Recent analysis of data on complex instruction in Israel reveals that the percentage of students talking and working together is also a predictor of gains on a test of verbal, logical thinking skills. At the individual level of analysis, Leechor(1988) documented the strong impact of talking and working together on achievement gains for students reading below grade level. He argued that these students were using other students as resources to reduce their level of uncertainty and were thus gaining the benefits of the group tasks. He also found that talking and working together were beneficial for students reading at grade level, but the effects were not so great as for students who needed help with reading the activity card.

How can delegation of authority be used to promote lateral relations in a classroom? In complex instruction, a major delegation of authority takes place through the use of written instructions on a task card given to the group. If the group speaks Spanish and English, there is one task card written in each language. The use of the task card means that the groups does not have to turn to the teacher for instruction, but can consult the card and each other. Typically, only one person in the group can consult the teacher and only after every attempt has been made to see if anyone in the group knows the answer.

If lateral relations are to be maximized, it is essential for the teacher to avoid hovering over student groups while they are at work.

Teachers should avoid touching students or materials. It is recommended that when teachers ask questions, they ask the group to discuss, move away from the group, and return in a little while to listen to the results of the group's discussion.

If the teacher attempts direct instruction while the students are engaged in their groups, the result will be less talking and working together and therefore less gains on measures of learning. These interconnections between classroom management and learning gains have been documented in two separate years of data collection on complex instruction(Cohen, Lotan, and Leechor, 1989).

Many of the published curricula featuring cooperative learning that are now coming on to the market suffer from an inadequate delegation of authority by the teacher. The students are placed in groups and told to work together. However,they do not have an activity card and must rely on directions from the teacher who frequently interrupts the group process to give directions and to assist in the discovery process. The teacher is concerned that the students get the "point" of the activity and tries to make sure that the group makes no errors while discovering what they are supposed to be discovering. The difficulty with this procedure is that it greatly cuts down on the talking and working together. The group has no chance to construct its own meaning or to achieve its own insights. Individuals who are lost have no chance to use other group members as resources.

In complex instruction, students receive intellectual guidance from the teacher in the orientation period and in the wrap-up when the teachers ideally knit together the various group reports and bring the findings to bear on the major concepts underlying the lesson. Moreover, there is

redundancy in the activities of the different learning centers, so if a student fails to grasp the concepts during one activity, when the group is rotated to another activity, there will be another chance to understand the underlying concepts.

Control of Behavior. How is behavior controlled when authority is delegated? The behaviors required of students in cooperative groups are quite different from those required in traditional classrooms. In the whole class setting, talking to other students is at best seen as mildly disruptive or at worst seen as cheating whereas during cooperative learning, peer communication becomes essential. Students must take responsibility for what happens in their group. Students must feel obligated to assist each other and to ask other students for help when necessary. If groups are to engage in discussion, then there are a set of new behaviors that will need to be developed such as listening to peers carefully, speaking concisely and giving other people a chance to talk .

A major method of behavior control in these circumstances is a set of cooperative norms -- internalized rules for behavior(Cohen, 1986). It is very helpful if students feel that they have the right to ask anyone in their group for help and that they have the duty to assist anyone who asks for help. If the new rules for behavior become thoroughly internalized, then students will demand conformity from each other. In this way, the teacher does not need to supervise lateral relations directly. The students will take some responsibility for enforcing the nature of these relations.

Almost all the developers of cooperative learning strategies recommend a set of skill-builders or games prior to engaging in cooperative learning. These preparatory activities have the purpose of teaching the new rules for behavior, of practicing the new behaviors, and of making

these new ways of behaving desirable and mandatory in order for the group to achieve its own goals. Particularly at the secondary level, teachers who feel pressed to cover content often want to skip these skill-building activities and get on with the cooperative group activities that cover substantive materials. However, omission of this stage results in disengagement and loss of class time through inadequately socialized behavior in the groups.

The second major method that teachers use to insure control is the delegation of authority to roles for students within groups. In complex instruction, each student plays a different role; and these roles rotate over time. For example, one student plays the role of a facilitator whose job it is to see to it that everyone in the group gets the help she or he needs. In essence, the facilitator has the authority to play the role that teachers ordinarily play while students are in groups. Zack(1988) found that the frequency with which students spoke and behaved like a facilitator was a strong predictor of the proportions of students talking and working together. Thus the students themselves through delegated authority are capable of creating and maintaining desirable lateral relations.

In contrast, when teachers try to engage in facilitating the completion of tasks given to small groups, the amount of lateral communication will decrease. This seemingly contradictory finding is explained by the fact that once authority has been delegated to students, it is not helpful for teachers to utilize direct supervision of student activities. You will recall that the rate of teacher facilitation in Figure I rose sharply while students were working in small groups. We work with teachers very systematically to help them lower the rate of this behavior while students are in groups.

Other useful roles in groups are materials person, clean-up person, a checker who makes sure everyone has completed their report or worksheet, a safety officer, or a timekeeper. All these are roles that teachers ordinarily play, but if this more complex setting is to be effectively managed, it is necessary to delegate this authority to students.

Students are held accountable in this situation of delegated authority just as firmly as in the traditional whole-class situation. Teachers make groups and individuals responsible for their own learning. Although groups are responsible for helping all group members finish their task, they have a wide choice of means for accomplishing the assigned activity. The teacher holds the students accountable for the end product, but not for the means by which they accomplish their work. Groups cannot move on to another task until everyone in their group has finished. Individuals have reports or worksheets that should be filled out; teachers can study these worksheets for student completion and understanding. Students can receive help from other students if they are having difficulty or want to discuss what they write in their reports.

Groups are not only responsible for helping each other get through the task, but they are also responsible for keeping members on-task. When problems develop with non-cooperative individuals, the teacher will say." I see that this group is having a problem. Why don't you talk it over and decide what this problem is and what you are going to do about it? I will be back in a few minutes to hear what you decide to do." These techniques of delegating responsibility to the group for managing behavior can be highly effective even in a Special Education setting with young children where some of the behavior is not easy for the group to manage. When instructing teachers in these methods, I often tell them that after

trying to get the children to mind their own business for so many years, I am urging them to ask the children to mind each other's business!

Dramatic Changes in the Role of the Teacher.

I have spent so much time telling you about what teachers should not be doing while students are working in small groups, that you might get the false impression that what complex instruction recommends is a role of laissez faire. When the new system of activities is being installed, the teacher is very active is developing roles, in reinforcing cooperative norms, in insisting that groups solve problems for themselves, and in prodding groups that are not functioning by a combination of questioning and insisting that people play their roles and enforce the norms. Some of this work is done while groups are in operation and some is done in orientation and wrap-up when the teacher discusses with the students what happened in their groups and has the class develop alternative strategies for solving problems that arise in the groups.

Once teachers are able to get the roles and norms working for them so that groups solve their problems without much help, they often say, " I feel like I've been done out of my job; it all works without me." This is the time when we remind them that delegating authority to students for doing so many of the jobs that used to belong to the teacher frees them up to carry out much more demanding aspects of their role.

If we examine once more the profile of teachers while the students are working in small groups(Figure I), we see that they are doing more questioning and more talking about children's thinking. One of the key tasks for the teacher while students are working in small groups is to stimulate thinking as well as talk about thinking among the students. The importance of this role is shown in recent data analysis of complex

instruction in Israel where Professor Rachel Ben Ari placed a good deal of emphasis placed on having the teachers stimulate the children to ask each other why things were happening as they were and with having them provide explicit reasoning to each other. The frequency of these kinds of teacher behaviors were much higher in the Israeli than in the American data. Moreover this frequency was correlated with gains at the classroom level in a test of verbal reasoning.

Another key role for the teacher that is not shown on the bar graph is the administration of status treatments so that students who are seen as good in schoolwork and students who are very popular do not take over and dominate the small groups. Equalizing status within the cooperative groups is a hallmark of complex instruction(Cohen, Lotan, and Catanzarite, 1989). In this presentation, I will only say that the management system is a necessary precondition for teachers being able to observe how low-status children make intellectual contributions to their group and specifically to assign competence to them. If teachers remain primarily concerned with management, they simply will not have the required time and attention to work with problems of status within the groups. If status problems are not remediated, then low-status students will not have as much access to lateral communication as high-status students and will therefore learn less (Cohen, 1984).

More generally, when the management system is in place, teachers are free to give specific feedback to groups and individuals. They can overhear both confusions and insights so that during the whole class wrap-up when the reporters from each group make a presentation, they can highlight problems and achievements for discussion. Most important, they can clarify how what happened in the groups relates to the underlying

concepts they are trying to teach. This is one of the most difficult jobs that teachers face during cooperative learning. Unless the teacher weaves the significance of the groupwork together with the underlying concepts, students are in danger of carrying away bits and pieces of knowledge from the isolated task activities without seeing how it all fits together. This task requires that teachers watch and listen very carefully to what is going on in groups and to the reports from each group during wrap-up. If the teacher is preoccupied with problems of disengagement and with students lined up to ask for help, then there is very little chance that the higher-order tasks of integrating knowledge will be accomplished.

Preparing Teachers for Delegation of Authority

Since 1979, we have prepared hundreds of teachers for complex instruction. During this period, we have consistently studied the character of implementation in the classroom, particularly during the first year that a teacher attempts to implement the program. These studies have given us considerable knowledge about the necessary and sufficient conditions for teachers to manage complex instruction and to play the new and different role that this teaching strategy requires. Some of our evidence is quantitative and systematic and some is gathered from repeated experience. Let me briefly share the highlights of what we have learned about this process.

In order for teachers to shift roles from that of direct supervision to that of delegating authority, treating status problems, developing children's thinking, and providing specific feedback, it is necessary to acquire a good grasp of the sociological theory I have outlined in this

presentation. Teachers need to understand about delegation of authority and how this does not mean giving up control of the classroom. They must grasp the concept of how roles and norms operate to take care of many of the behaviors they have always directly supervised. Most important, they must understand how delegation of authority acts to maximize the amount of student interaction and thus student learning. The grasp of underlying theory permits teachers to make adaptations and changes that are necessary in their very challenging classrooms, without destroying the most successful features of the program. Teachers' work becomes that of an engineer; they are able to adapt basic principles to fit particular circumstances.

Lotan(1985) has developed measures of the teachers' overall understanding of the theoretical concepts underlying this program. In data collected in 1982-83, she found that this measure was significantly negatively related to the rate of teacher's facilitation. You will recall that teacher's facilitation is a type of direct supervision in which the teacher tries to direct the students in getting through their tasks. In other words, the better the teacher's grasp of the underlying principles, the less she will attempt to use methods of direct supervision. In this set of data as well as in data collected in 1984-85(Ellis and Lotan, 1991) , the index of understanding is positively and significantly related to the frequency of non-routine behaviors such as status treatments, giving specific feedback, and talking about children's thinking. These results illustrate how a fundamental understanding of the underlying theory permits teachers to move away from direct supervision and to take on new and more challenging teacher behaviors that are critical when small groups are working on highly uncertain, conceptual tasks.

Teachers do not learn these new behaviors from lectures alone. They must have the chance to practice them actively in the workshop and to receive feedback on their performance in the workshop as well as in the classroom. We recommend two full weeks of a workshop. Repeated attempts by districts(against our advice) to save money by cutting down on the length of the workshop or by scheduling the workshop in various afer-school sessions have resulted in a disappointing quality of classroom implementation.

In the first week of the workshop, teachers hear an initial presentation of the concepts and have the chance to analyze practical situations and to apply the concepts in the context of small groups of workshop participants. In the second week, there is a practicum in which teachers practice with groups of children. Performance in the practicum is videotaped and a trainer discusses the results with the novice teacher. Because they have heard so much about avoiding hovering and delegation of authority, teachers generally recognize their own hovering and are amazed to see how much they tend to interfere with the children's interaction. We have found such videotape feedback invaluable in driving home this principle.

During the workshop, teachers prepare for classroom follow-up in which they will be systematically observed with a Teacher Observation Instrument and a Whole Class Observation Instrument. These instruments reflect the same basic principles they have been studying. For example, the Teacher Observation Instrument uses categories such as "disciplines" and "talks about children"s thinking" that appeared in Figure I. The teachers learn how to use each of these instruments and how they relate to the underlying concepts.

Each teacher ideally receives nine classroom observations and three feedback sessions from a trainer. The feedback session utilizes three classroom observations. The observations are reported to the teacher in the form of bar graphs that provide very specific feedback on how she is doing with respect to teaching behavior and classroom management. Discussion of why the teacher is having difficulty with, for example, delegation of authority or keeping students engaged, is an excellent opportunity for further instruction and deepening of her understanding of the theoretical principles. Ellis and Lotan(1991) report that for two years of data collection, the number of feedbacks that teachers receive is positively associated with the teacher's conceptual understanding of the program.

The feedback based on the Teacher Instrument readily demonstrates how she is doing on behaviors such as disciplining, facilitation, direct instruction, and giving status treatments. She sees one bar graph reflecting her behavior during whole class sessions of the orientation and wrap-up and one taken while small groups are in operation.

Teachers do not always receive the full three feedback sessions. Variability in the number of feedbacks they receive turns out to have important relationships to how well they are able to play their new roles. Ellis(1987) correlated the number of feedbacks to an index of direct supervision that included teacher facilitation and discipline. The relationship was strongly and significantly negative, i.e. the more feedbacks the teachers received, the more they were able to avoid direct supervision, whether at learning centers or during orientation and wrap-up. Furthermore, feedbacks reduced the proportion of direct supervision to all other behaviors observed. At the same time, she found

that the number of feedbacks had a positive effect on an index of non-routine teaching behaviors that included giving status treatments and talking about children's thinking.

The teacher also receives feedback on the Whole Class Observation Instrument. This instrument reflects the sociological view of classroom management quite clearly. It measures differentiation and the amount of lateral communication between students. The instrument given in Figure 2 consists of a grid representing grouping and activity patterns of students in the classroom. The observer counts the number of students engaged in various activities at the learning centers and sometimes away from the learning centers. The number of different learning centers in operation is also recorded. This instrument is like a snapshot of all the students and the teacher(s) in the classroom at a given point in time.

If the teacher has tried to deal with uncertainty by reducing the number of groups in operation to only three, supervising one herself and having her aide and a parent volunteer supervise the other two, this instrument will quickly reveal the problem. An observer will record only three groups in operation, a relatively small percentage of students talking and working together, as well as the fact that each group is being directly supervised by an adult.

The Whole Class Instrument yields a profile for the teacher that highlights the use of lateral communication as well as the most common management problems. Figures 3 and 4 present two profiles representing an average of classroom observations of two middle school classrooms where we are currently working. Figure 3 is an example of a classroom with high quality implementation; there are high levels of lateral communication and minimal management problems. The key measure of lateral communication is

the proportion of students who are seen talking together about their task or manipulating materials while talking about their task(Talk-Manip.).

As a result of analyzing the relationship of measures such as the percentage of students talking and working together to achievement gains, we have developed, over the years, a set of minimum standards for high-quality implementation. Specifically, we work with the teachers to raise the level of talking and working together above 36%. Similarly, we do not like to see more than 6% of the students disengaged from their tasks either at their learning centers or wandering around the classroom. Other indices of management problems are too many students waiting for the teacher and too many students moving about the classroom in connection with their group assignments. Having too many students moving about creates traffic problems and distractions and typically means that the classroom physical arrangements have not been set up so as to minimize the necessity for many trips per group. Figure 3 illustrates very low levels proportions of students exhibiting these behaviors.

In contrast, Figure 4 shows a pattern of implementation that gave cause for concern to the trainer providing feedback with this graph. Only one-quarter of the students are talking and working together; and a total of 8.4% of the students are either disengaged and wandering. If we add up all the students in the management categories of disengagement, waiting for the teacher or in transition, there is a total of just over 15%.

Typically, by the end of the first year of classroom support, almost all teachers are able to meet these standards of quality implementation. To be sure, we work with teachers who are interested and motivated to learn. From the perspective of researchers who investigate classroom management, it is especially interesting that the teachers who are unable

to master these techniques are almost invariably teachers who have difficulty with classroom management of whole class instruction. Evidently, if one has not mastered the basics of whole-class management, it is not at all easy to learn how to manage cooperative learning. In some sense, if one does not have authority with one's students in the first place, it is not possible to give some authority away by delegation.

Conclusion

We are in a period when there is great enthusiasm for cooperative learning, for curricula that produce more active learning, and for materials that will help to develop higher-order thinking skills. Many educators and researchers feel that unless we move in this direction, we will be unable to manage the increasing heterogeneity of American classrooms. Unless classrooms become more intrinsically interesting places than they are today, we will be unable to persuade this generation of learners to become motivated and involved in their own education. Many teachers are reporting that today's students will no longer sit still for traditional textbooks, teacher talk, and worksheets.

All of these trends require teachers not only to enlarge their repertoire of teaching strategies but also to enlarge their repertoire of management skills. Teachers will need to be able to manage a variety of task formats; both teachers and students must learn how to shift their roles according to the type of classroom task.

It has been my experience over the past 10 years that teachers find that sociology presents an enormously practical way for them to look at what they do in classrooms. They often ask me why no one ever told them about delegating authority in their teacher preparation programs. These

relatively simple sociological concepts and propositions have considerable utility for the researcher of classroom management as well. I hope that you who have been kind enough to ask me to come to talk with you today, will never have to ask why no one ever told you.

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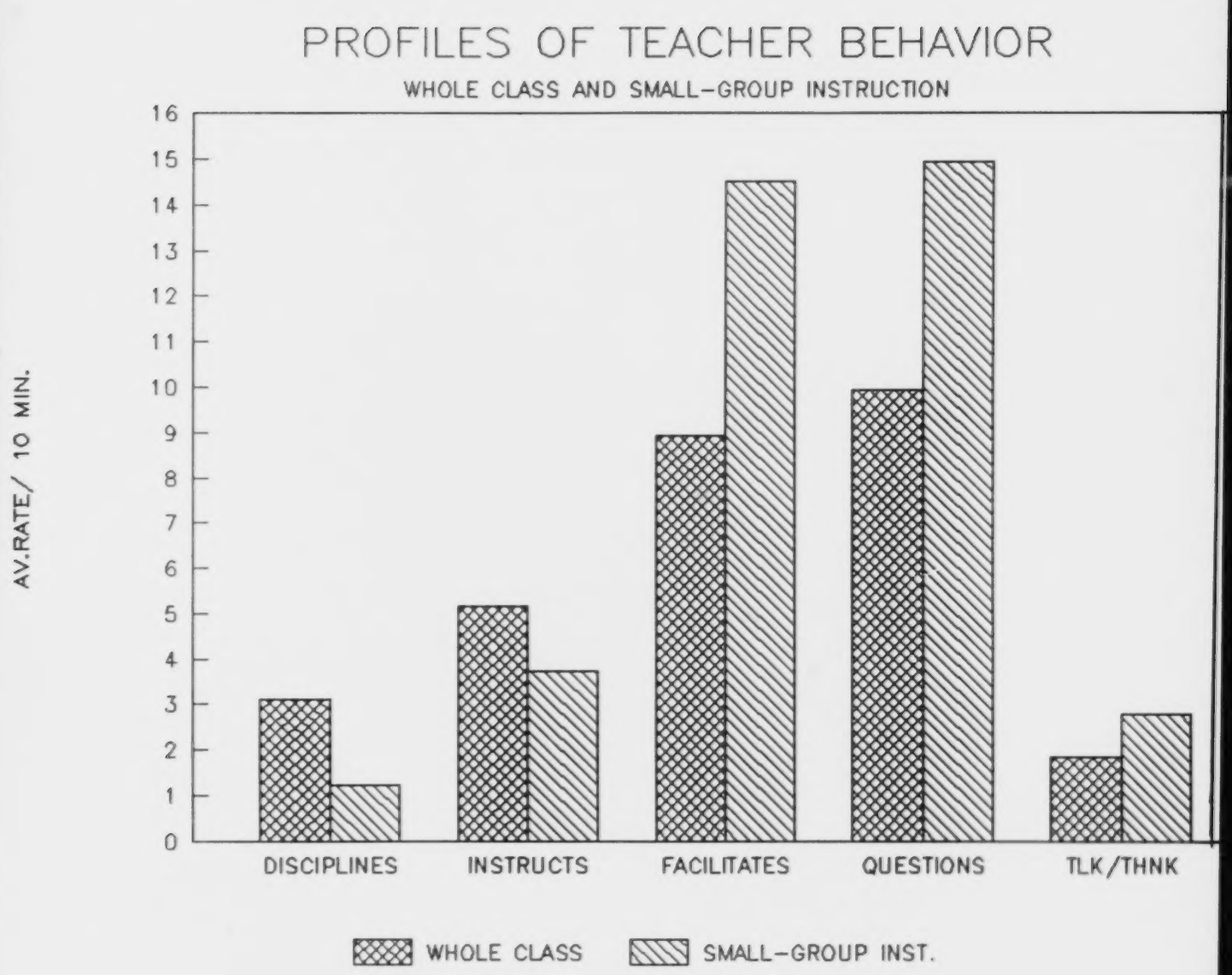
FIGURE 1


PROFILES OF TEACHER BEHAVIOR
WHOLE CLASS AND SMALL-GROUP INSTRUCTION
AV.RATE/ 10 MIN.
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
DISCIPLINES
INSTRUCTS
FACILITATES
QUESTIONS
TLK/THNK
WHOLE CLASS
SMALL-GROUP INST.

PROGRAM FOR COMPLEX INSTRUCTION

WHOLE CLASS OBSERVATION FORM / MIDDLE SCHOOL

Part I

Teacher Name : _____ Date of Obs._____

Total # Adults in Classroom _____ Time of Obs._____

Total # Students in Classroom_____ 1st or 2nd Obs. Today_____

Observer Name _____ Unit _____

# of Different Group Tasks Used: _____

Part II

Type of Activities in Small Groups

Small Groups	Talk or Talk/Manip "O"	Manip. Materials "O"	Read Write "O"	Look/Listen Other Task "O"	Disen-gaged	Wait-ing for Adult	N for rows
1							
2							
3							
4							
5							
6							
7							
8							
9							
N for columns							

Total N In Small Groups =

Part III

Not in Small Groups with Assigned Tasks:

a. In Group, Listening to Teacher : _____

b. In Transition (on business) : _____

c. Waiting for Adult : _____

d. Wandering, Fooling Around, Disengaged : _____

e. Other Academic Activity : _____

Total N, NOT AT CENTERS : _____

Please put a star * if adult is working with students in place where you have coded students.

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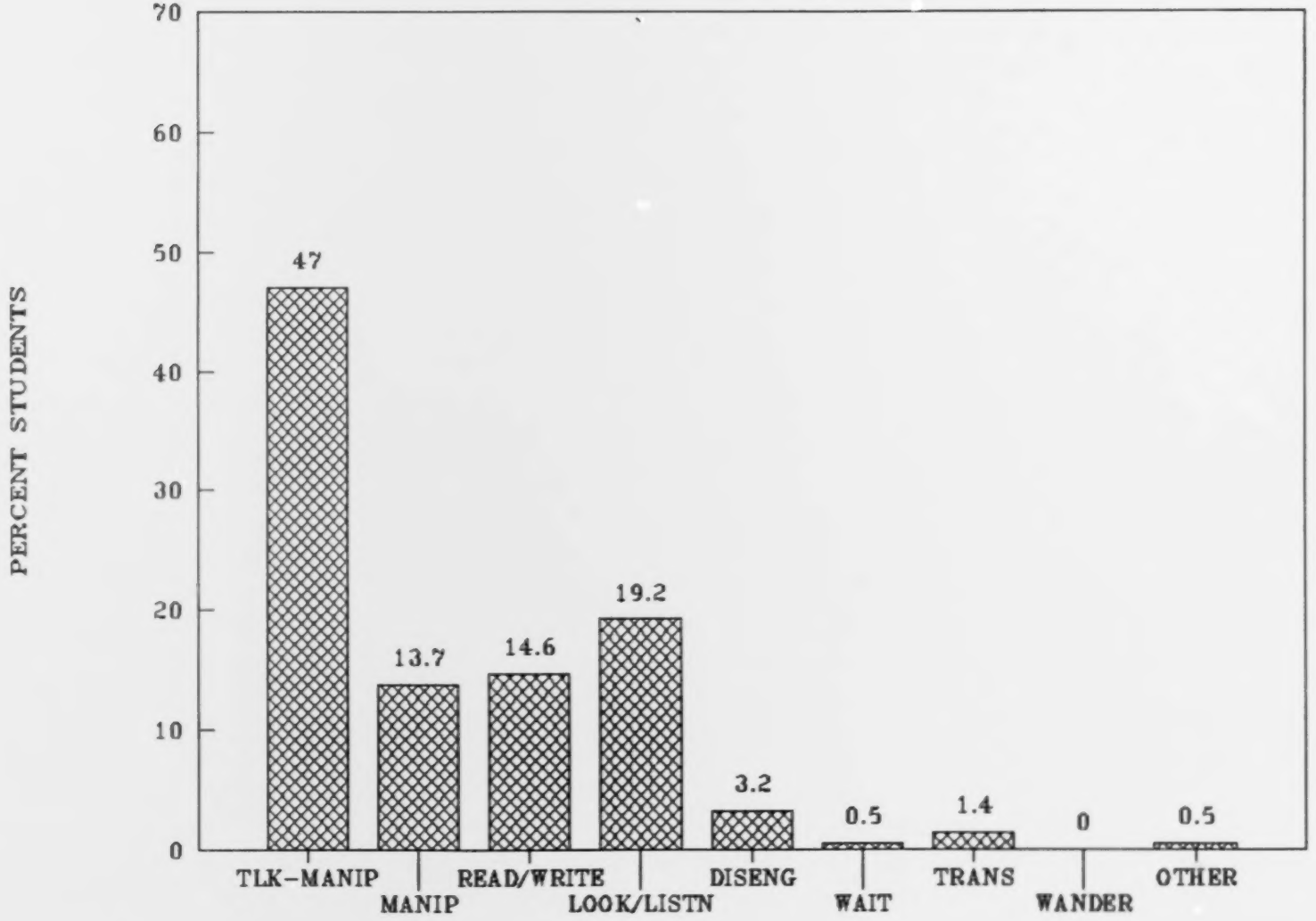
FIGURE II

FIGURE III

WHOLE CLASS OBSERVATION GRAPH



WHOLE CLASS OBSERVATION GRAPH